



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,724	01/17/2002	Dolors Sala	1875.0710001	2556
28393	7590	07/25/2006	EXAMINER	
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. 1100 NEW YORK AVE., N.W. WASHINGTON, DC 20005			PARK, JUNG H	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 07/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/046,724

Applicant(s)

SALA ET AL.

Examiner

Jung Park

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24-30 is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -
(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 1, 7, 8, 12, 18, 20, and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Chapman et al. (U.S. 6,438,123, "Chapman").

Regarding claim 1, Chapman discloses a method of reducing the bandwidth comprising:

- generating a full packet (*fig.2*) to be transmitted via the communication medium (24 & 26 *fig.1*);
- suppressing the full packet according to a descriptor table (*fig.3; col.4, ln.29-44* where it is inherent to have a table to change packet format from *fig.2* to *fig.3*) to create a suppressed packet (*fig.3*), wherein the suppressed packet includes a descriptor (*tag 49 fig.3 as an identifier; col.4, ln.60-67*) and wherein the suppressed packet requires less bandwidth than the full packet (*col.4, ln.41-44*);
- transmitting the suppressed packet via the communication medium (*70 fig.5*); and
- expanding the suppressed packet to the full packet according to the descriptor table and the descriptor (*col.4, ln.60 - col.5, ln.7 where ...receiving end uses the index to identify ...header packets*).

Regarding claim 12, Chapman does not explicitly mention, "descriptor table is initially set-up when the communication medium is configured, wherein a copy of the descriptor table is stored in the sender and the receiver, and where the sender copy and the receiver copy of the descriptor table maintain synchronization. However, it is inherent that descriptor table is initially set-up and is synchronized between CM and CMTS, otherwise, the suppressing (parsing) and restoring steps (col.4, ln.60-67) are inoperable.

Regarding claims 7 and 18, Chapman further discloses, the full packet type is one of a bandwidth request, a bandwidth grant, a transmission control protocol/Internet protocol acknowledgment message, a default message, a contention burst, a reserved burst, an immediate feedback message and a resolution algorithm message (col.5, ln.1-7 RTP header).

Regarding claim 8, Chapman further discloses, the step of transmitting the suppressed packet further includes allocating bandwidth for the suppressed packet (col.4, ln.29-40).

Regarding claims 20 and 21, Chapman further discloses, sender is a cable modem and the receiver is a CMTS or reverse (fig.1 downstream and upstream).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to

a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-6 and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chapman.

Regarding claims 2-6 and 13-17, Chapman further discloses that the communication medium is a cable network and/or Internet (col.1, ln.64-67), but silent on wireless network, satellite network, or optical network. At the time of the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to transmit packets via one of the mediums since those networks have been used for transmitting packets.

5. Claims 9-11, 19, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chapman in view of Cloonan et al. (U.S. 2002/0065907, "Cloonan").

Regarding claims 9 and 19, Chapman lacks what Cloonan discloses, the descriptor table includes a parser specification sub-table, an expansion sub-table and a mask specification sub-table (1207 fig.12, para.[0136] where rule tables for ...suppressed ...restored ...bit mask). Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to utilize the sub-tables of the descriptor to be standards compliant.

Regarding claims 10, 11, 22, and 23, Chapman lacks what Cloonan discloses, suppressing the entire header of the packet or suppressing a part of the entire header of the packet (para.[0136] where ...bit mask ...which bytes of the header that are suppressed). This claim is rejected for the same reasons and motivation set forth in the rejection of claim 9.

Allowable Subject Matter

6. Claims 24-30 are allowed.

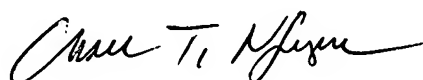
Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung Park whose telephone number is 571-272-8565. The examiner can normally be reached on Mon-Fri during 6:15-3:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JP
Jung Park
Patent Examiner
Art Unit 2616



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600